REMARKS

Claims 1-16 are pending. Claims 1-16 stand rejected under 35 USC § 102 (b) as anticipated by USP 5,532,333 to Stouffer et al. For the reasons which follow, Applicants submit that Stouffer et al. do not anticipate claims 1-16.

Applicants appreciatively noted the Examiner's kind suggestion to provide claim language which would describe how the process for minimizing energy consumption during a production of polyethylene terephthlate is preformed. It is believed that claim 1 actually does describe how this process is preformed. The manner in which energy consumption is minimized is by removing heat from hot pellets emerging from a solid state polymerization reactor and transferring that heat to a feed of pellets to the crystallizer so as to provide a means for energy integration. The feature of removing heat from hot pellets from a solid state polymerizational reactor, and transferring the heat removed to heat cooled pellets as a feed to the crystallizer, or are elements called for in claim 1.

In a typical process for producing polyethylene terephthlate pellets, there is provided a melt phase making the polymer from reactants up to a desired It.V. the molten polymer is fed to a pelletizer to produce solid amorphous pellets, solid amorphous pellets are fed to a crystallizer to produce crystallized pellets, and the crystallized pellets are fed ultimately to a solid state polymerization reactor to further advance the molecular weight of the polymer in the solid state.

This is the type of process employed by Stouffer et al., except that Stouffer et al. also teach a means by which crystallization can occur from the melt or from a solid. The PET produced by the process of Stouffer et al. is made by a melt phase polycondensation process, and then crystallized by either rapidly heating glassy (amorphous solid) PET to the temperature range or by cooling molten PET to that same temperature range. Once PET solid is obtained with the desired crystalline amorphology, the crystallized PET pellets can then be fed to a solid state polymerization reactor for further advancement of molecular weight in a solid state.

Some of the key features of claim 1, include removing the heat from hot pellets from the solid state polymerization reactor, and transferring that removed heat to heat

the cool pellets fed to the crystallizer. None of these features are disclosed by Stouffer et al.

Stouffer et al. is silent about what should be done with the heat from the hot pellets emerging from the solid state polymerization reactor. Stouffer et al. also says nothing about the source of the heat used to rapidly heat glassy PET.

The Examiner has noted that the terms "amorphous pellets are crystallized at elevated temperature," and "into a solid state polymerization reactor," and "removing heat from hot pellets...transferring and cooling" are anticipated by language in Stouffer et al. However, the phrase "removing heat from hot pellets" cannot be divorced from where the heat is removed, namely, the hot pellets from the solid state polymerization reactor. A rapid heat transfer to or from the material as disclosed by Stouffer et al. refers to the material subjected to crystallization, and says nothing about removing heat from hot pellets from the solid state polymerization reactor. Moreover, Stouffer et al. says nothing about the source of heat used to transfer heat to and from the Stouffer et al. material. In the instant claim 1, the source of the heat used to heat pellets as a feed to a crystallizer is obtained from the heat removed from the hot pellets from the solid state polymerization reactor. This feature is not disclosed or suggested by Stouffer et al.

For these reasons, Applicants respectfully request withdrawal of the rejection and allowance of claims 1-16. A Notice of Appeal has been submitted in order to be fully responsive to the Final Rejection.

The Examiner is invited to contact the undersigned with any further questions related to the prosecution of this application.

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Respectfully submitted,

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Oct. 2, 2006
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CERTIFICATE OF MAILING UNDER 37 CFR 1.8(a)

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Mail Stop Amendment, P. O. Box 1450, Alexandria, VA 22313-1450.

Karen L. Taylor

10/3/2006
Date